Claim Amendments

1. (Currently amended) A method of forming a powder metal material, the method comprising:

compressing at least a portion of an iron-containing metallurgical powder in a die at no greater than 20 tsi to provide a green compact, wherein the metallurgical powder comprises sponge iron and is substantially free of internal lubricant; and

sintering the compact.

2. (Original) The method of claim 1, wherein the sponge iron includes substantially all of the iron in the metallurgical powder.

3. (Original) The method of claim 1, wherein the metallurgical powder comprises at least 10 up to 50 weight percent sponge iron.

4. (Original) The method of claim 1, wherein the metallurgical powder further comprises at least one of a pure atomized iron powder and an atomized iron-containing powder.

5. (Original) The method of any of claims 1 and 4, wherein sintering the green compact comprises induction sintering the green compact.

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6. (Canceled)

7. (Original) The method of claim 1, wherein compressing at least a portion of the metallurgical powder comprises compressing at least a portion of the metallurgical powder in a self-lubricating die.

8. (Original) The method of claim 1, wherein compressing the metallurgical powder comprises compressing the metallurgical powder at a pressure in the range of 5 tsi up to 20 tsi.

9. (Original) The method of claim 1, wherein the green compact has a green strength of at least 1000 psi.

10. (Original) The method of claim 1, wherein the green compact has a density of at least 4.0 g/cc.

11. (Original) The method of claim 1, further comprising:

hot forming the sintered compact.

12-51. (Cancelled)

52. (Currently amended) A method of forming a powder metal material, the method comprising:

compressing at least a portion of an iron-containing metallurgical powder including 15 up to 25 weight percent sponge iron and ~~no more than 0.3 weight percent~~ substantially free of internal lubricant in a die at less than 20 tsi to provide a green compact having a green strength of at least 1000 psi; and

sintering the green compact.

53. (Previously presented) The method of claim 52, wherein sintering the green compact comprises induction sintering the green compact.

54-58. (Canceled)

59. (Currently amended) The method of claim ~~58~~52, wherein the green compact has a density of at least 4.0 g/cc.

60. (New) The method of claim 1, wherein compressing at least a portion of an iron-containing metallurgical powder comprises compressing the powder in an unheated die.

61. (New) The method of claim 52, wherein compressing at least a portion of an iron-containing metallurgical powder comprises compressing the powder in an unheated die.

62. (New) A method of forming a powder metal material, the method comprising:

compressing at least a portion of an iron-containing metallurgical powder in an unheated die at no greater than 20 tsi to provide a green compact, wherein the metallurgical powder comprises sponge iron; and

sintering the compact.

63. (New) The method of claim 62, wherein the sponge iron includes substantially all of the iron in the metallurgical powder.

64. (New) The method of claim 62, wherein the metallurgical powder comprises at least 10 up to 50 weight percent sponge iron.

65. (New) The method of claim 62, wherein sintering the green compact comprises induction sintering the green compact.

66. (New) The method of claim 62, wherein compressing the metallurgical powder comprises compressing the metallurgical powder at a pressure in the range of 5 tsi up to 20 tsi.

67. (New) The method of claim 62, further comprising:

hot forming the sintered compact.

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